



State of Utah

Department of  
Environmental Quality

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Site ID: 11867

## Title V Operating Permit

**PERMIT NUMBER: 4900222002**

**DATE OF PERMIT: May 30, 2005**

Date of Last Revision: May 30, 2005

This Operating Permit is issued to, and applies to the following:

**Name of Permittee:**

RT Manufacturing Incorporated  
1186 North Industrial Park Drive  
Orem, UT 84057

**Permitted Location:**

RT Manufacturing  
1186 North Industrial Park Way  
Orem, UT 84057

UTM coordinates: 4,463,382 meters Northing, 438,114 meters Easting  
SIC code: 2511

## ABSTRACT

RT Manufacturing Inc. operates a wood furniture manufacturing plant located in Orem, Utah. They are a major source of hazardous air pollutants and are subject to the Wood Furniture NESHAP, 40 CFR, Part 63, Subpart JJ. They are also a major source of volatile organic compounds.

### UTAH AIR QUALITY BOARD

By:

Richard W. Sprott, Executive Secretary

Prepared By:

Robert Grandy

## Operating Permit History

1/5/2000 - Permit issued	Action initiated by an initial operating permit application	
3/19/2001 -Permit modified	Action initiated by an administrative amendment (initiated by source)	to revise hazardous air pollutant limits.
5/30/2005 - Permit issued	Action initiated by a renewal of an operating permit	

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**Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.**

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

**Section I: General Provisions**

**I.A. Federal Enforcement.**

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

**I.B. Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

**I.C. Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

**I.D. Permit Expiration and Renewal.**

**I.D.1 This permit is issued for a fixed term of five years and expires on May 30, 2010. (R307-415-6a(2))**

**I.D.2** Application for renewal of this permit is due by November 30, 2009. An application may be submitted early for any reason. (R307-415-5a(1)(c))

**I.D.3** An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

**I.D.4** Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

**I.E. Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

**I.F. Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

**I.G. Permit Fee.**

**I.G.1** The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

**I.G.2** The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

**I.H. No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

**I.I. Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

**I.J. Inspection and Entry.**

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))

I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))

I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

**I.K. Certification.**

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

**I.L. Compliance Certification.**

I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **January 2, 2006** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))

I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;

I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.

I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice  
(mail code 8ENF)  
EPA, Region VIII  
999 18th Street, Suite 300  
Denver, CO 80202-2466

**I.M. Permit Shield.**

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

**I.N. Emergency Provision.**

I.N.1 An “emergency” is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))

I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))

I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))

I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))

I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))

I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

**I.O. Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

**I.P. Off-permit Changes.**

Off-permit changes are governed by R307-415-7d(2).

**I.Q. Administrative Permit Amendments.**

Administrative permit amendments are governed by R307-415-7e.

**I.R. Permit Modifications.**

Permit modifications are governed by R307-415-7f.



I.S.       **Records and Reporting.**

I.S.1       Records.

I.S.1.a       The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))

I.S.1.b       For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

I.S.1.b.1       The date, place as defined in this permit, and time of sampling or measurement.

I.S.1.b.2       The date analyses were performed.

I.S.1.b.3       The company or entity that performed the analyses.

I.S.1.b.4       The analytical techniques or methods used.

I.S.1.b.5       The results of such analyses.

I.S.1.b.6       The operating conditions as existing at the time of sampling or measurement.

I.S.1.c       Additional record keeping requirements, if any, are described in Section II, Special Provisions.

I.S.2       Reports.

I.S.2.a       Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))

I.S.2.b       All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))

I.S.2.c       The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 14 days.** Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3       Notification Addresses.

I.S.3.a       All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality  
P.O. Box 144820  
Salt Lake City, UT 84114-4820  
Phone: 801-536-4000

- I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII  
Office of Enforcement, Compliance and  
Environmental Justice (mail code 8ENF)  
999 18th Street, Suite 300  
Denver, CO 80202-2466

For reports, notifications, or other correspondence  
related to permit modifications, applications, etc.

Environmental Protection Agency, Region VIII  
Office of Partnerships & Regulatory Assistance  
Air & Radiation Program (mail code 8P-AR)  
999 18th Street, Suite 300  
Denver, CO 80202-2466  
Phone: 303-312-6440

**I.T. Reopening for Cause.**

- I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

**I.U. Inventory Requirements.**

Emission inventories shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

## **Section II: SPECIAL PROVISIONS**

### **II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.**

(R307-415-4(3)(a) and R307-415-4(4))

#### **II.A.1 Spray Booths** (designated as SB-10)

Unit Description: Ten spray booths equipped with particulate filters.

#### **II.A.2 Space Heaters** (designated as Space Heaters)

Unit Description: Natural gas fired space heaters with approximate combined rating of 4.4 MMBtu/hr.

#### **II.A.3 Air Make-Up Units** (designated as AM-3)

Unit Description: Three natural gas burning air make-up units approximately 2.75 MM Btu/hr each.

### **II.B. Requirements and limitations.**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

#### **II.B.1 Conditions on permitted source (Source-wide)**

##### **II.B.1.a Condition:**

National Emissions Standards for Wood Furniture Operations- 40 CFR 63 Subpart JJ:

- (A) Finishing Materials (VHAP compliance): Volatile Hazardous Air Pollutant (VHAP) emissions from finishing materials shall be limited by using one of the following methods:
- (1) Using compliant materials:
    - (a) Using topcoats, sealers, stains, washcoats, basecoats, and enamels having VHAP contents no greater than 1.0 lb VHAP/lb solids, as applied.
    - (b) Using thinners containing no more than 10% Hazardous Air Pollutant by weight for thinning sealers and stains.
    - (c) Using thinners containing no more than 3% Hazardous Air Pollutant by weight for thinning or mixing washcoats, basecoats, and enamels.
  - (2) Achieving a weighted average VHAP content for all coatings no greater than 1.0 lb VHAP/lb solids, as applied.
  - (3) Using a combination of methods (1) and (2) where the weighted average VHAP content will be calculated for selected coatings instead of all coatings.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.802]

- (B) Contact Adhesives: Adhesives, excluding aerosol adhesives and adhesives applied to nonporous substrates, shall contain no more than the following amounts of VHAP as applied:
- (1) Foam adhesives used in products that meet the upholstered seating flammability requirements of Local, State, or Federal fire regulatory agencies, shall contain no greater than 1.8 lb VHAP/lb solids as applied.
  - (2) All other adhesives, including foam adhesives not used in products that meet flammability requirements, shall contain no greater than 1.0 lb VHAP/lb solids as applied.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.802]

- (C) Strippable Spray Booth Coatings: Strippable booth coatings shall contain no greater than 0.8 lb VOC/lb solids as applied.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.802]

- (D) Workpractice Implementation Plan: A workpractice implementation plan shall be prepared and maintained onsite. It shall include the following:
- (1) Operator training course: All new, existing, and contract personnel who are involved in cleaning, finishing, gluing, washoff operations, use of manufacturing equipment, or implementation of 40 CFR 63 Subpart JJ, (National Emissions Standards for Wood Furniture Operations), shall be trained. All new personnel, those hired after December 7, 1998, shall be trained upon hiring. All personnel shall be given refresher training annually. The training program shall contain, at a minimum, the following:
    - (a) A list of all current personnel requiring training, including name and job description;
    - (b) An outline of the subjects to be covered in the initial and refresher training for each position, or group of personnel;
    - (c) Lesson plans for courses to be given at the initial and annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize material usage and overspray, and appropriate management of cleanup wastes;
    - (d) A description of methods to be used at the completion of initial or refresher training to demonstrate and document successful completion, and a record of the date that each employee is trained.
  - (2) Leak inspection and maintenance plan: The permittee shall maintain a written leak inspection and maintenance plan that specifies:

- (a) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings , adhesives, or organic HAP solvents;
  - (b) An inspection schedule;
  - (c) Methods for documenting the date and results of each inspection and any repairs that were made;
  - (d) The time frame between identifying a leak and making the repair, which adheres to the following schedule:
    - (i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than 5 calendar days after the leak is detected; and
    - (ii) Final repairs shall be made within 15 calendar days, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within 3 months.
- (3) Cleaning and washoff solvent accounting system: The permittee shall develop an organic HAP solvent accounting form to record:
- (a) The quantity and type of organic HAP solvent used each month for washoff and cleaning;
  - (b) The number of pieces washed off, and the reason for the washoff; and
  - (c) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- (4) Chemical composition and washoff solvent requirements: Each owner or operator of an affected source shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of 40 CFR Part 63 Subpart JJ (National Emissions Standards for Wood Furniture Operations), in concentrations subject to MSDS reporting as required by OSHA.
- (5) Spray booth cleaning requirements: The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

- (6) Storage requirements: The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- (7) Application equipment requirements: Application equipment requirements: Conventional air spray guns shall not be used for applying finishing materials except under the following circumstances:
  - (a) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
  - (b) For touch-up and repair under the following circumstances:
    - (i) The touch up and repair occurs after completion of the finishing operation; or
    - (ii) The touch up and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touch up and repair are applied from a container that has a volume of no more than 2.0 gallons.
  - (c) If spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
  - (d) If emissions from the finishing application station are directed to a VOC/ VHAP control device;
  - (e) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual reporting period; or
  - (f) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The affected source shall demonstrate technical or economic infeasibility by submitting to the Agency a videotape, a technical report, or other documentation that supports the affected source's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the affected source's claim of technical or economic infeasibility:
    - (i) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
    - (ii) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

- (8) Line cleaning requirements: Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- (9) Gun cleaning requirements: Each owner or operator of an affected source shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- (10) Washoff operation requirements: Each owner or operator of an affected source shall control emissions from washoff operations by:
  - (a) Using normally closed tanks for washoff; and
  - (b) Minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.
- (11) Formulation assessment plan for finishing operations: The permittee shall prepare and maintain a written formulation assessment plan that:
  - (a) Identifies VHAP from the list presented in Table 5 of 40 CFR 63 Subpart JJ (National Emissions Standards for Wood Furniture Manufacturing Operations) that are being used in finishing operations by the affected source.
  - (b) Establishes a baseline usage level for each VHAP identified above. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16.
  - (c) Tracks the annual usage of each VHAP identified above that is present in amounts subject to MSDS reporting as required by OSHA.
  - (d) If, after November 1998, the annual usage of the VHAP identified exceeds its baseline level, then the owner or operator of the affected source shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
    - (i) The exceedance is no more than 15.0 percent above the baseline level;

- (ii) Usage of the VHAP is below the de minimis level presented in Table 5 of 40 CFR Part 63 Subpart JJ (National Emissions Standards for Wood Furniture Manufacturing Operations) for that VHAP;
  - (iii) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
  - (iv) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.
- (e) If none of the above explanations are the reason for the increase, the owner or operator shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- (f) If, after November 1998, an affected source uses a VHAP of potential concern listed in Table 6 of 40 CFR Part 63 Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in Table 6 of 40 CFR Part 63 Subpart JJ that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level, then the affected source shall provide an explanation to the permitting authority that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in paragraphs (d)(i) through (d)(iv), the affected source shall follow the procedures established in (e) above.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.803].

#### II.B.1.a.1

##### **Monitoring:**

- (A) Finishing Materials: Compliance with the VHAP emissions standards listed in this permit for finishing materials shall be demonstrated using one of the following methods:



- (1) Use VHAP compliant finishing materials and maintain the corresponding records identified in the Recordkeeping section of this permit.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.804(a)(1)]

- (2) Calculate the average VHAP content for all finishing materials used at the facility, using the equation below, maintaining a value of E no greater than 1.0:

$$E = \frac{(Mc_1Cc_1 + Mc_2Cc_2 + \dots + Mc_nCc_n + S_1W_1 + S_2W_2 + \dots + S_nW_n)}{(Mc_1 + Mc_2 + \dots + Mc_n)}$$

where:  $Mc$  = the mass of solids in finishing material (c) used monthly, lb solids/month.

$Cc$  = the VHAP content of a finishing material (c), in lb VHAP/lb solids.

$S$  = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials.

$W$  = the amount of solvent, in pounds, added to finishing materials during the monthly averaging period.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.804(a)(1)]

- (3) Use a combination of methods (1) and (2) above.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.804(a)(4)]

- (B) Contact Adhesives: Records shall serve as monitoring.
- (C) Strippable Spray Booth Coatings: Records shall serve as monitoring.
- (D) Work Practice Implementation Plan: Records shall serve as monitoring.

#### II.B.1.a.2

##### **Recordkeeping:**

- (A) Finishing materials (VHAP compliance): Compliance with VHAP emissions standards shall be demonstrated by maintaining the following records:
- (1) For the compliant coating option, the VHAP content in lb VHAP/lb solids, as applied for each finishing material, and

- (2) For the averaging option, copies of the VHAP averaging calculation for each month following the December 7, 1998 compliance date, as well as data on the quantity of coatings and thinners used for those calculations, and
- (3) A certified product data sheet for each finishing material and thinner.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.806(b)-(c)]

(B) Contact Adhesives: The following records shall be maintained:

- (1) A certified product data sheet for each contact adhesive subject to the emission limits in this permit; and
- (2) The VHAP content, in lb VHAP/lb solids, as applied, of each contact adhesive subject to the emission limits in this permit.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.806(b)]

(C) Strippable Spray Booth Coatings: The following records shall be maintained:

- (1) A certified product data sheet for each strippable spray booth coating subject to the emission limits in this permit; and
- (2) The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in this permit.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.806(b)]

(D) Work Practice Implementation Plan: Records associated with fulfilling the requirements of the work practice implementation plan shall be maintained; they shall include but not be limited to:

- (1) Records demonstrating that the operator training course is in place;
- (2) Records collected in accordance with the leak inspection and maintenance plan;
- (3) Records associated with the cleaning and washoff solvent accounting system;
- (4) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the

percentage of finishing materials applied with conventional air spray guns for each semi-annual period;

- (5) Records associated with the formulation assessment plan for finishing operations; and
- (6) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.806(e)]

- (E) Records of the compliance certifications submitted for each semiannual period shall be maintained.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.806(h)]

- (F) Records of all other information submitted with the semi-annual reports required by 40 CFR 63.807(c), and the compliance status report required by 40 CFR 63.807(b), shall be maintained.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.806(i)]

- (G) Records required by this permit shall be maintained in accordance with Provision S.1. in Section I of this permit. (origin: 40 CFR 63.800)

#### II.B.1.a.3

#### **Reporting:**

- (A) Semiannual Compliance Reporting for VHAP Standards: A semiannual report covering the previous 6 months of wood furniture manufacturing operations shall be submitted and shall include a compliance certification. The compliance certification shall:
  - (1) Include a statement whether VHAP compliant stains, washcoats, sealers, topcoats, basecoats, enamels, thinners, contact adhesive, and strippable booth coatings, as applicable, have been used each day in the semiannual reporting period; and
  - (2) Include a statement of whether or not the average VHAP content for each month within the semiannual reporting period was no greater than 1 lb VHAP/lb solids (when using option for average VHAP content for finishing materials); and
  - (3) Include the results of averaging calculations for each month in the semiannual period; and
  - (4) Identify days of noncompliance and the reasons for noncompliance; and

- (5) Include the measures taken to bring the affected source back into compliance if there were days of noncompliance; and
- (6) State whether the work practice implementation plan is being followed; and
- (7) Identify provisions of the work practice implementation plan that have not been implemented; and
- (8) Be signed by a responsible official; and
- (9) Be submitted according to the following schedule:
  - (a) The first report shall be submitted no later than July 7, 1999.
  - (b) Subsequent reports shall be submitted within 30 calendar days after the end of each 6-month period following the first report.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.804(g), and 63.807(c)]

- (B) Written notification required by Formulation Assessment Plan: The owner or operator of an affected source required to provide a written notification by part 11 of the work practice implementation plan, Formulation assessment plan, shall include in the notification one or more statements explaining the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

[Authority granted under 40 CFR 63.800; Condition originated in 40 CFR 63.807(e)]

- (C) Reports required by this permit shall be submitted in accordance with Provision S.2. in Section I of this permit.

#### II.B.1.b

##### **Condition:**

VOC emissions shall be no greater than 117.54 tons per 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-169-01]

#### II.B.1.b.1

##### **Monitoring:**

VOC emissions shall be determined on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 15 days after the end of each calendar month.

#### II.B.1.b.2

##### **Recordkeeping:**

VOC emissions shall be determined by maintaining a record of VOC emitting materials used each month. The records shall include the following data for each material used:

1. Name of the VOC emitting material, such as; paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
2. Density of each material used (pounds per gallon).
3. Percent by weight of VOC in each material used.
4. Gallons of each VOC emitting material used each month.
5. The amount of VOC emitted monthly by each material used, calculated by the following procedure:

$$\text{VOC} = \frac{(\% \text{ VOC by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times (\text{gal Consumed}) \times \frac{(1 \text{ ton})}{(2,000 \text{ lb})}$$

6. The total amount of VOC emitted monthly from all materials used.
7. The amount of VOCs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above, to provide the monthly total VOC emissions.

II.B.1.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.c

**Condition:**

Combined HAP emissions shall be no greater than 54.48 tons per 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-169-01]

II.B.1.c.1

**Monitoring:**

HAP emissions shall be determined on a rolling 12-month total. Based on the first day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 15 days after the end of each calendar month.

II.B.1.c.2

**Recordkeeping:**

HAP emissions shall be determined by maintaining a record of HAP emitting materials used each month. The records shall include the following data for each material used:

1. Name of the HAP emitting material, such as; paint, adhesive, solvent, thinner, reducers, chemical compounds, toxics, isocyanates, etc.
2. Density of each material used (pounds per gallon).
3. Percent by weight of HAP in each material used.
4. Gallons of each HAP emitting material used each month.

5. The amount of HAP emitted monthly by each material used, calculated by the following procedure:

$$\text{HAP} = \frac{(\% \text{ HAP by Weight})}{(100)} \times \frac{(\text{Density lb})}{(\text{gal})} \times (\text{gal consumed}) \times \frac{(1 \text{ ton})}{(2,000 \text{ lb})}$$

6. The total amount of HAP emitted monthly from all materials used.
7. The amount of HAP's reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above, to provide the monthly total HAP emissions.

II.B.1.c.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2

**Conditions on Spray Booths ( SB-10)**

II.B.2.a

**Condition:**

Visible emissions shall be not greater than 5 percent opacity. [Authority granted under R307-305-1(1); condition originated in DAQE-169-01]

II.B.2.a.1

**Monitoring:**

In lieu of monitoring via visible emissions observations, the spray booth particulate capture system shall be inspected to demonstrate that it is functioning properly. Inspections shall consist of the following observations made at the specified frequencies:

- (A) Inspection for holes in the particulate filters- weekly.
- (B) Inspection of the particulate filters to determine proper installation within the support rack- weekly.
- (C) Inspection of the exhaust fan to ensure that it is operating- whenever the spray booths begin operation.

II.B.2.a.2

**Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3

**Conditions on Space Heaters ( Space Heaters)**

II.B.3.a

**Condition:**

Visible emissions shall be not greater than 10 percent opacity unless otherwise specified in this permit. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-169-01]

II.B.3.a.1

**Monitoring:**

In lieu of monitoring via visible emission observations, fuel usage shall be monitored to demonstrate that only pipeline-quality natural gas is used as fuel.

II.B.3.a.2

**Recordkeeping:**

Records such as gas bills, and gas meter readings shall be used to demonstrate natural gas usage. Records shall be maintained as described in Provision I.S of this permit.

II.B.3.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4

**Conditions on Air Make-Up Units ( AM-3)**

II.B.4.a

**Condition:**

Visible emissions shall be not greater than 10 percent opacity unless otherwise specified in this permit. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-169-01]

II.B.4.a.1

**Monitoring:**

In lieu of monitoring via visible emission observations, fuel usage shall be monitored to demonstrate that only pipeline-quality natural gas is used as fuel.

II.B.4.a.2

**Recordkeeping:**

Records such as gas bills, and gas meter readings shall be used to demonstrate natural gas usage. Records shall be maintained as described in Provision I.S of this permit.

II.B.4.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.C. **Emissions Trading.**

(R307-415-6a(10))

Not applicable to this source.

II.D. **Alternative Operating Scenarios.**

(R307-415-6a(9))

Not applicable to this source.

**Section III: PERMIT SHIELD**

A permit shield was not granted for any specific requirements.

#### **Section IV: ACID RAIN PROVISIONS.**

**This source is not subject to Title IV. This section is not applicable.**



## REVIEWER COMMENTS

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This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-169-01                      dated    March 13, 2001

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**1. Comment on an item originating in DAQE-169-01 regarding permitted source (Source-wide)**

AO condition 5: has not been carried over into this permit. That AO requirement is equivalent to, and has been subsumed by, the workpractice implementation plan requirements of 40 CFR 63 Subpart JJ which are addressed in this Title V Permit. [Comment last updated on 4/17/2001]

**2. Comment on an item originating in DAQE-169-01 regarding permitted source (Source-wide)**

AO condition 8: The propane usage requirement for forklifts has not been carried over into this permit. Title V has no authority to include limitations on mobile sources.

The natural gas usage requirement for non mobile combustion sources has not been carried over into this permit. This equipment is natural gas fired by design, therefore, physically incapable of burning any other type of fuel. [Comment last updated on 4/17/2001]

**3. Comment on an item originating in DAQE-169-01 regarding Spray Booths (Unit SB-10)**

AO condition 10: has not been carried over into this permit. The requirement for equipping spray booths with particulate capture systems is not an emission or workpractice limit. It is a construction specification and therefore is not carried over into this Operating Permit as a limit, but is included as part of the emissions unit description.

The AO requirement for all air to pass through the particulate capture system will be met through filter system inspections included in the spray booth parametric opacity monitoring condition in this permit. [Comment last updated on 4/17/2001]

**4. Comment on an item originating in 40 CFR 63.6\_ Woodfurniture MACT regarding permitted source (Source-wide)**

O&M and SSMP requirement for HAP control equipment: The Operation and Maintenance (O&M) condition from 40 CFR part 63.6 for MACT sources has not been included in this permit because it applies primarily to equipment for HAP control and RT does not operate such equipment. There are other O&M conditions in the work practice implementation plan required by the MACT that sufficiently cover anything happening during a start-up or shutdown (leak detection and repair, equipment cleaning requirements, etc). A Startup Shutdown and Malfunction Plan (SSMP) is not required for this source because that requirement applies only to Wood Furniture Sources using control equipment. [Comment last updated on 7/12/1999]

**5. Comment on an item originating in 40 CFR part 63.803(l)(4)(iii) regarding permitted source (Source-wide)**

Wood Furniture MACT requirement referencing state requirements for VHAP: The state of Utah currently does not have an air toxics regulation fitting the category referenced by the Wood Furniture MACT, 40 CFR part 63.803(l)(4)(iii) [Comment last updated on 7/12/1999]

**6. Comment on an item originating in 40 CFR 63, Subpart JJ regarding permitted source (Source-wide)**

40 CFR 63:804: includes a control device option that has not been included in this permit. Lacking an approval order to operate such equipment, use of a control device for achieving HAP compliance is not an option for this source at the present time. [Comment last updated on 12/15/1999]

**7. Comment on an item originating in CAM Applicability regarding permitted source (Source-wide)**

Compliance Assurance Monitoring: CAM applicability has been evaluated. There are no CAM requirements in this permit. [Comment last updated on 5/23/2005]